DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014636 Address: 333 Burma Road **Date Inspected:** 07-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Zhou Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Bike Path

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Bay 19

This QA inspector observed ZPMC qualified welding personnel identified as 062788 perform Flux Cored Arc Welding (FCAW) Welding on Bike Path, weld joint identified as BK4A6-010-029, 030, 041 and 042. ZPMC QC is identified as Mr. Zhou Cheng. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 062761 perform FCAW Welding on Bike Path, weld joint identified as BK4A6-008-029, 030, 041 and 042. ZPMC QC is identified as Mr. Zhou Cheng. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 062788 perform FCAW Welding on Bike Path, weld joint identified as BK4A6-010-031~034, 115~118, 019~022, 043, 044, 049, 050. ZPMC QC is identified as Mr. Zhou Cheng. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2133.

This QA inspector observed ZPMC qualified welding personnel identified as 062761 perform FCAW Welding on

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Bike Path, weld joint identified as BK4A6-008-031~034, 115~118, 019~022, 043, 044, 049, 050. ZPMC QC is identified as Mr. Zhou Cheng. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2133.

Ultrasonic Testing (UT) - Document: 005908

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. SB014-050 - 008, 018, 020, 037, 031, 067, 061 – Green Tag No: 12321

2. SB012-052 - 005, 019, 025, 037, 055, 061- Green Tag No: 12308

Description of Incident: During the Quality Assurance in-process visual inspection of Bike Path at Bay 19, this Caltrans Quality Assurance (QA) Inspector observed single pass fillet welds that measured approximately 12 to 13mm. The approved WPS (WPS-B-T-2133) is only qualified for a maximum single pass fillet weld size of 9mm. The Bike Path numbers are identified as BK004A-008 and BK004A-010. The oversize fillet weld numbers are identified as BK004A8-010-015, 016, 019, 020, 021, 022 and BK004A8-008-049, 050, 051, 52, 022, 021, 015, 016. These fillet welds are joining between End Diaphragm Plate (BKX11) to Side Plate (BKPL3A) and End Diaphragm Plate (BKX11) to Stringer Plate (BKX8A). The weld joints are designated as non Seismic Performance Critical Member (non SPCM). For further information, please see the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

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Inspected By: Kumar, Vibin Quality Assurance Inspector **Reviewed By:** McClendon, Timothy QA Reviewer